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09/366,614	08/03/1999	JONATHAN HERMAN FISCHER	24-16-2	3269

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EXAMINER

NGUYEN, DUC MINH

ART UNIT	PAPER NUMBER
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2643

DATE MAILED: 02/25/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/366,614

Applicant(s)

FISCHER ET AL.

Examiner

Duc Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 6, 18 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-17 and 19-21 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-9, 13-17, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rouse (6,411,680) in view of Gaudel (Publication No. 2,495,866).

Consider claim 1. Rouse teaches a method of powering an electronic circuit (telephone set 5) with a telephone line (1 and 3), comprising detecting a voltage across the telephone line, and applying telephone line power to the electronic circuit based on a characteristic of the detected voltage (col. 2, ln. 43 to col. 3, ln. 25-31; col. 4, ln. 34-65).

Rouse does not teach conditioning the voltage across the telephone line. However, Gaudel teaches conditioning the voltage across the telephone line (e.g., the voltage on the TIP and Ring line (10-11) is conditioned by Resistor (12), MOV 13, bridged rectified (4-7), current regulating (1)).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Gaudel into the teachings of Rouse in order to provide an improved over-voltage detection that guard electronic circuit against power surge and over-voltage conditions.

Consider claim 2. Rouse further teaches applying telephone line power to the electronic circuit when the detected voltage exceeds a selected voltage level (the switch 7 is closed only when there is a safe voltage level that lays between the over-voltage and under-voltage thresholds; col. 3, ln. 25-31; col. 4, ln. 55-62).

Consider claim 3. Rouse further teaches that the voltage across the telephone line is detected while the telephone line is in an on-hook state (the under-voltage and over-voltage are sensed before the controller 15 allows the switch 7 to be closed; col. 4, ln. 55-62).

Consider claim 4. Rouse further inherently teaches the voltage across the telephone line is detected while limiting the DC current drain from the telephone line to <1.0 microamps (the under-voltage and over-voltage are sensed before the controller 15 allows the switch 7 to be closed; col. 4, ln. 55-62. In other words, the under-voltage and over-voltage are sensed while the telephone line is in an on-hook state. In this state, there is no current (0 ampere) drained from the telephone line).

Consider claim 5. Rouse further teaches the switch (7) is closed only when there is a safe voltage level that lays between the over-voltage and under-voltage thresholds (col. 3, ln. 25-31; col. 4, ln. 55-62). This safe voltage level is the voltage level required for proper operation of a digital logic circuit in the electronic circuit (e.g., digital telephone set would inherently have some logic circuits).

Consider claims 7-9. Rouse's line (27, fig. 2) is the set/reset line (col. 4, ln. 64 to col. 5, ln. 22).

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Consider claim 13. Rouse teaches an apparatus for powering an electronic circuit with telephone line power, comprising a voltage detector (9 or 11); reset signal (set/reset signal on line 27, fig. 2); and a switch (7) for applying telephone line power to the electronic circuit (5).

Consider claim 14. Rouse further teaches the reset signal is generated when measured voltage exceeds a selected voltage (the switch 7 is closed only when there is a safe voltage level that lays between the over-voltage and under-voltage thresholds; col. 3, ln. 25-31; col. 4, ln. 55-62).

Consider claim 15. Rouse further inherently teaches the voltage across the telephone line is detected while limiting the DC current drain from the telephone line to <1.0 microamps (the under-voltage and over-voltage are sensed before the controller 15 allows the switch 7 to be closed; col. 4, ln. 55-62. In other words, the under-voltage and over-voltage are sensed while the telephone line is in an on-hook state. In this state, there is no current (0 ampere) drained from the telephone line).

Consider claim 16. Rouse teaches an apparatus for powering an electronic circuit with telephone line power, comprising a voltage detector (9 or 11); reset signal (set/reset signal on line 27, fig. 2); and a switch (7) for applying telephone line power to the electronic circuit (5).

Consider claim 17. Rouse further teaches the reset signal is generated when measured voltage exceeds a selected voltage (the switch 7 is closed only when there is a safe voltage level that lays between the over-voltage and under-voltage thresholds; col. 3, ln. 25-31; col. 4, ln. 55-62).

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Consider claim 20. Rouse further teaches a high impedance resistor connected in series with the electronic circuit for limiting the voltage applied across the electronic circuit (col. 4, ln. 42-45).

3. Claims 10-11, 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rouse (6,411,680) in view of Gaudel (Publication No. 2,495,866) as applied to claims 1-5, 7-9, 13-17, 20 above, and further in view of Colvin et al (5,471,524).

Consider claims 10, 19. Rouse in view of Gaudel does not explicitly teach storing up charge from the telephone line prior to applying telephone line power to the electronic circuit.

Colvin teaches storing up charge from the telephone line prior to applying telephone line power to the electronic circuit (capacitors C5-C6, fig. 3, col. 9, ln. 64 to col. 10, ln. 25).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Colvin into the teachings of Rouse in view of Gaudel, so that to ensure that the microprocessor (19) operates properly.

Consider claim 11. Colvin further teaches dissipating the stored up charge across the electronic circuit when the detected voltage exceeds a selected voltage level (fig. 3, col. 9, ln. 64 to col. 10, ln. 25).

4. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Price et al (5,783,999) in view of Richter et al (6,149,319) and Rouse (6,411,680).

Consider claim 12. Price teaches a method of powering a data access arrangement (38) with a telephone line (32, 34), the data access arrangement having a electronic circuit (the DAA

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inherently has electronic circuit), the method comprising applying a reset signal to the data access arrangement (col. 9, ln. 56-63), detecting the voltage across the telephone line while the telephone line is in an on-hook state (col. 8, ln. 40 to col. 9, ln. 63), powering the DAA with telephone line power when the detected voltage falls below the maximum thresholds (approximately 48 volts and 120 mA; col. 8, ln. 40 to col. 9, ln. 63), and turning-off the reset signal to the electronic circuit after powering the DAA (col. 8, ln. 17-30; col. 9, ln. 56-63). Price, however, does not clearly teach that the DAA having CMOS electronic circuit.

Richter teaches a PCMCIA card having CMOS electronic circuit (col. 1, ln. 26 to col. 6, ln. 34).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Richter into the teachings of Price in order to provide an improved under-voltage and over-voltage detections that guard electronic circuit against power surge, under-voltage conditions. Furthermore, it also solves various problems and disadvantages occurring within multivoltage power supply and control systems and integrated circuits.

Price in view of Richter does not clearly teach powering the DAA with telephone line power when the detected voltage exceeds a voltage necessary to properly operate the electronic device.

Rousse teaches powering the telephone equipment with telephone line power when the detected voltage exceeds a voltage necessary to properly operate the electronic device (the switch 7 is closed only when there is a safe voltage level that lays between the over-voltage and under-voltage thresholds; col. 3, ln. 25-31; col. 4, ln. 55-62).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Rouse into the teachings of Price in view of Richter in order to provide an improved under-voltage and over-voltage detections that guard electronic circuit against power surge and under-voltage conditions.

5. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Rouse (6,411,680) in view of Gaudel (Publication No. 2,495,866) as applied to claims 1-5, 7-9, 13-17, 20 above, and further in view of Horvath (6,204,706).

Consider claim 21. Rouse in view of Gaudel does not clearly teach a time delay element for delaying of the reset signal.

Horvath teaches a time delay element for delaying of the reset signal (col. 3, ln. 56 to col. 4, ln. 23).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the teachings of Horvath into the teachings of Rouse in view of Gaudel in order to provide an improved under-voltage and over-voltage detections that guard electronic circuit against power surge and under-voltage conditions.

Allowable Subject Matter

6. Claims 6, 18 are allowed over the prior art of record.


Conclusion

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duc Nguyen whose telephone number is 703-308-7527. The examiner can normally be reached on 6:00AM-2:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Curtis Kuntz can be reached on 703-305-4708. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Duc Nguyen
Primary Examiner
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2/12/04